

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION 1401 EAST BROAD STREET RICHMOND, VIRGINIA 23219 2000

Gregory A. Whirley Commissioner

July 17, 2012

Mr. Gordon N. Dixon, Director Department of Professional and Occupational Regulation 9960 Mayland Drive, Suite 400 Richmond, Virginia 23233

Re: Professional Signing and Sealing Updates

Dear Mr. Dixon:

On October 28, 2009, the Virginia Department of Transportation (VDOT) presented the Department of Professional and Occupational Regulation (DPOR) with a letter entitled "Professional Signing and Sealing Implementation" and an attached document entitled "Virginia Department of Transportation - Documents Required to be Signed and Sealed". This outlined the documents that would be signed and sealed to bring the Department into compliance with the legislation passed by the General Assembly in 1992 on professional registration. The implementation was discussed with DPOR on several occasions. VDOT stated that during the implementation, the process would need to be flexible and recognized that clarifications and adjustments to this newly implemented process may be required.

This letter serves to notify DPOR that VDOT has reviewed its implementation and needs to clarify the surveying portion of the original submitted document. VDOT is implementing the use of a survey Right of Way plan sheet as outlined in the original document. An example is attached. Right of way monumentation will be set once construction has been completed by state forces or on call consultants. The original and the revised documentation are attached and the changes are in bold print.

The VDOT policies and procedures can be viewed at the following web link: http://www.virginiadot.org/business/digital_signatures.asp.

We have appreciated our excellent working relationship and we look forward to reviewing any comments you would like to make concerning our clarification.

Sincerely,

Gregory A. Whirley Commissioner of Highways

Attachments

Malcolm T. Kerley, P.E. Chief Engineer

VIRGINIA DEPARTMENT OF TRANSPORTATION Documents Required to be Signed and Sealed

Traffic Engineering

The following Traffic Engineering related document will be required to be sealed and signed by a Professional Engineer.

- 1. Traffic Engineering Studies and Recommendations
 - a. Speed Limit Studies
 - b. Signal Warrant Studies
 - c. Traffic Impact Analysis conducted by VDOT
- 2. Advertised Construction Plans
 - a. Pavement Marking Plans
 - b. Sign Plans
 - c. Reports for Maintenance of Traffic plans (per IIM 24.1; for both Construction and Maintenance projects)
 - i. Includes changing speed limit for Work Zones
- 3. Traffic signal design or modification
 - a. New signal phasing and changes to signal phasing
 - b. New signal timing (changes to yellow/all red clearance time that deviates from methodology given in TE 306 requires PE seal)
- 4. Road safety audit reports, safety studies requiring detailed engineering *and/or detailed accident analysis or corridor traffic safety studies
- 5. Guardrail recommendations.
- 6. Design of structures supporting ITS equipment (ITS components-signs, cameras and supporting electrical equipment/communication infrastructure does not require PE seal)
- 7. Through Truck Restriction Studies and Recommendations**
- 8. Operational/Capacity Analysis***
- 9. Traffic Standards (i.e. Traffic Control Devices)

*A review of crash data and the physical characteristics of the roadway that includes and evaluation of potential engineering countermeasures (physical roadway improvements and/or use of traffic control devices) to reduce the potential for crashes at that location or along that section of road. The resulting product (may be a simple design sketch) shall be sealed and signed.

** Through truck restriction studies and recommendations respond, according to law, to a formal request by a local governing body to restrict a particular roadway to through truck traffic. Studies involve a review of crash and traffic data and the physical characteristics of both the roadway requested to be restricted to through truck traffic and the identified alternate route, as well as public comments received as required by law, and the criteria adopted by the Commonwealth of Transportation Board (CTB). The study includes a recommendation to the CTB or designee to approve or deny the formal request for a through truck restriction on that particular roadway.

***A review of the volume and types of traffic and the physical characteristics of the roadway that includes capacity analysis or traffic flow simulation and considers potential roadway or traffic control improvements to improve traffic flow through the location or section of roadway.

Structure and Bridge

The following Structure and Bridge related documents will be required to be sealed and signed by a Professional Engineer.

- 1. Advertised Construction Plans
 - a. New Bridges
 - b. Superstructure replacement projects
 - c. Repair/rehabilitation projects (for detail sheets that require engineering)
 - d. Deck replacement projects
 - e. Bridge widening projects
 - f. Bridge-only projects
- 2. Bridge Standard Sheets (for sheets that require engineering, they will be sealed by Central Office S&B Engineering Services program area staff. If the standard sheet is modified during project development, the project designer modifying the standard sheet, or supervisor, shall sign and seal the modified standard sheet).
- 3. Bridge Design Exceptions
- 4. Bridge Design Guidelines (guidelines generated by the Central office S&B Engineering Services staff and used as a default in lieu of special design, such as deck slab reinforcing steel tables).
- 5. Bridge Live Load Ratings
- 6. Bid Documents for No-Plan Bridge Projects (only for detail sheets that were engineered)
- 7. Geotechnical Reports and Recommendations
- 8. Revisions of Construction Plans
- 9. Non-Standard Special Structure Plans (i.e., Signe, High-Mast Light, Bridge Sign Attachment, Foundations, Retaining Walls, etc.)

Location and Design

The following Location and Design related documents will be required to be sealed and signed by a Professional Engineer. In addition, the list includes documents that require the signature and seal of a Landscape Architect or Licensed Surveyor.

- 1. Advertised Construction Plans
 - a. Roadway (pavement/alignments/enhancements)
 - b. Drainage plans
 - c. Utility relocation plans
 - d. Traffic plans (signals/ITS/MOT/lighting/signs/pavement markings)
 - e. Non-Standard Special Structure Plans (i.e., signs, foundations, retaining walls, etc.)
 - f. Landscape Architecture plans (landscaping, wetland mitigation) to be signed by a Landscape Architect or licensed professional
 - g. Minimum roadway Plan and No Plan projects
 - h. Approach plans for bridge projects (for detail sheets that require engineering, includes bridge maintenance projects, etc.)
- 2. Hydraulics and Hydrologic Analyses
 - a. Recommendations and Reports
 - i. Includes hydraulic analysis and reports for CLOMR (conditional letter of map revision), CLOMR-F (conditional letter of map revision fill), LOMR (letter of map revision), and LOMR-F (letter of map revision fill)
 - b. Drainage and Storm Water Management Calculations and Computations
- 3. Interchange Justification Reports an Interchange Modification Reports
- 4. Right-of-Way Plans to be signed by a Licenses Surveyor
- 5. Revisions of Construction Plans
- 6. Design Exceptions
- 7. Location and Design Standard Sheets. (if the standard sheet is modified during project development, the project designer modifying the standard sheet, or supervisor, shall seal and sign the modified standard sheet).

<u>Survey</u>

The following survey related documents will be required to be sealed and signed by a licensed Land Surveyor. Stricken and/or bolded items indicate clarifications/changes to our exiting process.

- 1. Plats
 - a. Final Plats plats that represent a **land boundary** final or completed survey
 - b. Plats showing Right-of-Way takes for condemnations
 - c. Plats prepared to show areas of condemnation
 - d. Plats prepared to obtain easements (drainage, utilities, access, etc.)
 - e. Oyster lease plats
 - f. Final Right of Way plats performed post construction(donated right of way)
 - g. Letterform documents or plats used for RADAR, LADAR or VASCAR calibration ranges
 - h. U.S. Corp of Engineer(COE) plats
 - i. Department of Conservation and Recreation(DCR) plats
- 2. Surveys
 - a. Topographic survey
 - b. Wetland mitigation site surveys
 - c. Complete Survey for Design
 - d. Bridge and large drainage structure stakeout surveys(see Road and Bridge Spec. 105.13 and 517)
- 3. High water information or date to be used in FEMA or FIRM studies
- 4. Geodetic control data
- 5. Reports of documents establishing control for aerial photography to assure standard compliance.
- 6. FEMA flood plain revisions(Letterform), would include the following:
 - a. CLOMR(conditional letter of map revision)
 - b. CLOMR-F(conditional letter of map revision fill)
 - c. LOMR(letter of map revisions)
 - d. LOMR-F(letter of map revision fill)
- 7. Wetland Permit and easement sketch/plats
- 8. Right of Way plan sheets As shown on the Right of Way plan sheet, monumentation will be set at all angle breaks on the perimeter of VDOT acquired right of way. Additional monumentation will be set online where tangents or curves exceed 500'.

Scheduling and Contract

The following Construction related documents will be required to be sealed and signed by a Professional Engineer.

- 1. In-field design changes or plan revisions accompanying work orders (includes significant material modifications)
- 2. Specifications revisions/additions via work order
- 3. Within the contract assembly, a title sheet with seal approving the chosen Standard Specifications, Special Provisions, Special Specifications, Copied Notes, General Notes and pertinent design data/details.

<u>Materials</u>

The following Materials related documents will be required to be sealed and signed by a Professional Engineer.

- 1. Geotechnical Reports and Recommendations (such as soil surveys)
- 2. Pavement Reports
 - a. Design Reports requiring investigation (beyond windshield survey), pavement structural analysis, structural design, etc.

<u>Right-of-Way/Utility</u>

The utility relocation/adjustment plans included in the VDOT contract are the only documents identified as needing to be sealed and signed under the utility discipline. The utility relocation and adjustment plans are indicated under the Location and Design discipline section of this task.



7/18/2012 1:25:40 PM

PROJECT MANAGER____*Timatby_Taylor_* SURVEYED BY _____*Albert_Borland_*. DESIGN SUPERVISED BY __*Mr_Pbillips_* DESIGNED BY _____*Michael Brady__*

CURVE DATA

 $\begin{array}{l} CHICKEN CITY RD \\ CUrve CHICK-I \\ PI = 114+15.75 \\ DELTA = 19^{\circ} 56' 32.87" (LT) \\ D = 17' 12' 21'' \\ T = 58.54' \\ L = 115.90' \\ R = 333.00' \\ R = 333.00' \\ R = 333.00' \\ R = 333.00' \\ R = 113+57.20 \\ R = 113+57.20 \\ R = 4,184,210.247 \\ PT = 114+73.11 \\ N = 595,694.089 \\ E = 4,184,286.678 \\ e = NC \\ V = 30mph \end{array}$

 $\begin{array}{l} CHICKEN \ CITY \ RD \\ Curve \ CHICK-2 \\ PI = 115+30.19 \\ DELTA = 19^{\circ} 27^{\circ} 09.76^{\circ} (RT) \\ D = 17^{\circ} 12^{\circ} 21^{\circ} \\ C = 113.06^{\circ} \\ R = 333.00^{\circ} \\ R = 4,184,286.678 \\ PT = 115+86.17 \\ R = 4,184,260.889 \\ e = NC \\ V = 30mph \end{array}$

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595,748.	429	4,184,363.169	16.013

SYMBOL LEGEND

R/W Monuments

 \parallel

NOTES:

- 1. THIS RIGHT OF WAY SHEET REPRESENTS A FIELD RUN PERIMETER SURVEY OF THE PROPOSED R/W LIMITS. ALL OTHER SURVEY OF THE PROPOSED R/W LIMITS. ALL OTHER ADJOINING/DEPARTING BOUNDARY LINES SHOWN ARE COMPILED FROM VARIOUS SOURCES: FOUND FIELD MONUMENTATION.METES AND BOUNDS DESCRIPTIONS, AND RECORDED PLATS. THE ADJOINING LINES DO NOT REPRESENT A FIELD RUN SURVEY OF THE ADJOINING PROPERTIES AND ARE A BEST FIT BASED ON COMPILED DATA. ALL AREAS SHOWN FOR R/W TAKES AND EASEMENTS ARE APPROXIMATE ONLY.
 - ALL OF THE PROPERTIES PHYSICAL IMPROVEMENTS ARE NOT SHOWN HEREON. N
 - m,
 - THIS PLAN SHEET WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND MAY NOT SHOW ALL EASEMENTS WHICH MAY AFFECT THE PROPERTY SHOWN HEREON.
 - 4. NO DESIGNATION OR LOCATION OF SUBSURFACE UTILITIES WAS PERFORMED DURING PREPARATION OF THIS PLAN SHEET.
 - 5. THIS SURVEY DATUM IS BASED ON VDOT PROJECT * U000-190-109, R-201,UPC * 12345.
- 6. RIGHT OF WAY MONUMENTATION TO BE SET UPON COMPLETION OF CONSTRUCTION.
- 7. NO CEMETERY SITES WERE OBSERVED ON THE SUBJECT PROPERTY.THIS DOES NOT PRECLUDE THEIR EXISTENCE.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION 1401 EAST BROAD STREET RICHMOND, VIRGINIA 23219-2000

David S. Ekern, P.E. COMMISSIONER

October 28, 2009

Mr. Jay W. DeBoer, Director Department of Professional and Occupational Regulation 9960 Mayland Drive Richmond, Virginia 23233

Re: Professional Signing and Sealing Implementation

Dear Mr. DeBoer:

As you are aware, the Virginia Department of Transportation (VDOT) has been actively implementing the requirements for professional registration in compliance with legislation passed by the General Assembly in 1992.

This letter is in response to the Department of Professional and Occupational Regulation's (DPOR's) letter dated September 8, 2006 (attached) concerning the requirement of signing and sealing of plans.

VDOT has developed policies and procedures to address this concern. The following web link, <u>http://www.virginiadot.org/business/digital_signature.asp</u> will provide you direct access to our website for these policies and procedures. In addition, I am providing as an attachment the list of identified documents VDOT professionals will sign and seal.

We appreciate your staff's efforts in working with VDOT during this transition period. Please express our appreciation to them.

Sincerely,

David S. Ekern, P.E. Commissioner

Attachments

Malcolm T. Kerley, P.E. Chief Engineer

VirginiaDOT.org WE KEEP VIRGINIA MOVING

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